

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A laser gyro comprising:
an optical ring cavity,
a solid-state amplifying medium and a feedback system,
two optical modes propagating in opposite directions from each other inside said optical cavity, the feedback system ~~being intended to slave~~ slaving the intensity of the two counterpropagating modes:
wherein the amplifying medium is anisotropic and ~~in that wherein~~ the feedback system includes, inside the cavity,
an optical assembly comprising an optical element that acts on the polarization state of the counterpropagating modes and a rotor exhibiting a nonreciprocal effect that also acts on the polarization state of the counterpropagating modes, at least one of the effects of said optical element or of said rotor exhibiting an adjustable nonreciprocal effect, the feedback system being configured so that, if one of the optical modes has a light intensity higher than the other, its intensity is increased less by the amplifying medium so as to bring output modes to the same intensity level.
2. (Previously Presented) The laser gyro as claimed in claim 1, wherein when the optical element acts on the polarization state of the counterpropagating modes in a fixed manner, said element is a linear polarizer, the polarization direction of which is not parallel to the direction of maximum gain of the amplifying medium.
3. (Previously Presented) The laser gyro as claimed in claim 1, wherein when the optical element acts on the polarization state of the counterpropagating modes in a fixed manner, said element is a birefringent optical plate.

4. (Previously Presented) The laser gyro as claimed in claim 3, wherein said optical element is a birefringent optical plate obtained from a naturally birefringent material.
5. (Previously Presented) The laser gyro as claimed in claim 4, wherein said optical element is made of quartz.
6. (Previously Presented) The laser gyro as claimed in claim 1, wherein when the optical element acts on the polarization state of the counterpropagating modes in an adjustable manner, said element is an optical plate exhibiting electrically controlled birefringence.
7. (Currently amended) The laser gyro as claimed in claim 1, wherein when the rotor exhibiting a nonreciprocal effect acts on the polarization state of the counterpropagating modes in a fixed manner, [[it]] and comprises a material exhibiting the Faraday effect polarized by a permanent magnet.
8. (Currently amended) A laser gyro comprising:
 - an optical ring cavity,
 - a solid-state amplifying medium and
 - a feedback system having two optical modes propagating in opposite directions one with respect to the other inside said optical cavity, the feedback system being intended to slave the intensity of the two counterpropagating modes, wherein the amplifying medium is anisotropic, in that the cavity is nonplanar, the counterpropagating modes do not propagate in a single plane, and in that the feedback system includes, inside the cavity, at least a rotor exhibiting an adjustable nonreciprocal effect, and wherein the feedback system is configured so that, if one of the optical modes has a light intensity higher than the other, its intensity is increased less by the amplifying medium so as to bring output modes to the same intensity level.
9. (Previously Presented) The laser gyro as claimed in claim 1, wherein the device exhibiting a nonreciprocal effect acts on the polarization state of the counterpropagating modes in an adjustable manner, it comprises a material exhibiting the Faraday effect and polarized by an induction coil controlled by an adjustable electrical current.

10. (Currently amended) The laser gyro as claimed in claim 7, wherein the amplifying medium ~~[[and]]~~ also comprises the material exhibiting the Faraday effect ~~are produced in the same material.~~

11. (Previously Presented) The laser gyro as claimed in claim 1, wherein the cavity is monolithic.